





Co-ordinating Office Utrecht Science Shops

Bijlhouwerstraat 6, 3511 ZC Utrecht, phone: +31 30 - 253 61 50

Utrechtse Wetens pswinkels, voor maatschappijgericht onderzoek

# **Utrecht Science Shops** connecting science and society

Natascha Morsink

**Co-ordinating Office Utrecht Science Shops** 

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#### Introduction

The concept of Science Shops ('Wetenschapswinkels') originates from the Netherlands. They are referred to as 'Dutch Science Shops'. The Science Shops were grounded on the idea that Dutch universities had to play a more prominent role in the solution of social problems.

Science Shops have a bridging function between university and society. They mediate requests for research between societal organizations, and groups within the university. Currently, there are thirty-three active Science Shops within eleven Dutch universities. In this brochure you can read more about the Science Shops, the organizations they work for, and the projects they carry out.

Utrecht University has seven Science Shops, divided over several Faculties, covering the fields of Biology, Pharmacy, Arts, Law, Social Sciences, Physics and Chemistry. In addition, a co-ordinating office supports the Science Shops.

# What are Science Shops?

Science Shops make scientific knowledge accessible to organizations with a need for community based research. Organizations can apply for research assignments in areas such as nature, environment, health, art and culture, law, social aid and communication. The Science Shops are embedded in the Faculties of the Utrecht University and are financed by the University Board.

The aim of the Science Shops is twofold. The first aim is the dissemination of scientific knowledge in the form of research or advice to organizations that have a need for community based research. Generally these are non-profit organizations.

The second aim is to support scientific education and research. In order to achieve these aims, the Science Shops provide courses, practical assignments and internships. Community based research is carried out by students and sometimes by volunteers as part of a teaching practice, thesis, or as an optional course. Furthermore, Science Shops function as a window to society; drawing attention to social trends, identifying gaps in the field of research and bringing these to the attention of university staff members and boards.

# Who may consult the Science Shops?

Basically, Science Shops work for non-profit social organizations. The organization should use the research results in actual practice. In some cases, research assignments are carried out for commercial organizations, provided the request for research serves a broad public interest and that the results are not used commercially.

Apart from a contribution to the expenses, Science Shops work free of charge for non-profit organizations with few financial resources. Examples of the research areas covered by assignments are environmental, ethnic, and social-legal issues. Requests from individuals are only dealt with if they serve a broader public interest. Assignments will also be considered if the efforts of the Science Shop are in proportion to the social benefits generated by the research.

# **How do Science Shops operate?**

Science Shops perform several tasks in order to realize their objectives. Mediation is the most important of these. In addition, Science Shops have advisory tasks in the field of education and publicity, and they also carry out research assignments themselves.

#### Mediation and consultation

Organizations that have a need for research approach one of the seven Science Shops with a request. Sometimes, such a request can be answered quickly, but more often thorough research is necessary. The staff members of the Science Shops approach students to carry out this research and they invite academic staff members to oversee, guide and support the student and the research process. The student gets credits for his or her contribution in the (research) project. The academic supervisors will oversee the project with respect to the relevance and the scientific quality of the research. In specific cases, the complexity of the research necessitates the appointment of a paid researcher.

#### Research

Most Science Shops are exclusively concentrating on mediating activities, but some of them do research themselves. Staff members of the Science Shops may carry out the research themselves if not enough students with appropriate expertise, means or capacity for the research can be found.

#### Advice and consultation

Advising is one of the regular tasks of the Science Shops. For the Chemistry Science Shop it is the main task. Contrary to most others, this Science Shop is predominantly based on volunteers. The main reason for this is that not many requests can be converted into research projects for students, due to the limited time span of student projects. In this Science Shop in particular advice is broadly interpreted to include support to the client in organizing themselve as well as in translating research results into action strategies for the client.

#### Publicity and education

In addition to the above-mentioned main tasks, the Science Shops also perform a number of other support activities. For example the knowledge and skills of the Science Shops in acquisition of requests for research and researchers and providing for publicity in order to make the research results widely known are offered to students and staff members of the faculties. In addition, the Science Shops teach regular courses within the curriculae of the faculties, they make inventories of the faculties expertise, and social trends are monitored closely.

#### Example of an average request for research

# The request

An organization addresses a telephonic or written request for research to one of the Science Shops. First, it is considered whether the request complies with the criteria for research projects. If the request satisfies these criteria, an appointment is made for an intake meeting with the potential client.

# Preliminary research

Following the intake meeting, a short preliminary research is carried out to ascertain the background of the request, and to examine what the organization wishes to achieve. It is also checked whether the request is appropriate for a well defined scientific research. If so, an academic staff member is appointed to supervise the project.

# The researcher(s)

The Science Shops look for one or more students who are interested in the project and who will design a research plan. The plan is submitted for approval to the academic supervisor and the client.

#### The research

If the research plan is approved, the research may start. During the research, the Science Shop co-ordinates the process of the research. The task of the academic supervisor is to see that the scientific level of the research is satisfactory.

During the research, communication between the persons involved is very important to keep the activities well geared to one another. By organizing regular meetings, the interests of the client can be best guaranteed and the researchers can check their research track.

#### The results

When the research is completed, the client and the academic supervisor will consider if there are sufficient reasons to publish the results. The Science Shop is able to take care of the publication of the results. The Science Shop also takes care of the production and distribution of the reports which are published in the 'Science Shop Series'. In accordance with the objectives of the Science Shops all research results are public.

# **Examples of requests for research**

Does a (female) hairdresser lose customers if she wears a headscarf? Does a Muslim employee have a right to take some days off during the Muslim 'Feast of Sugar'? The Bureau against Racial Discrimination (Het Landelijk Bureau ter bestrijding van Rassendiscriminatie) asked the **Science Shop for Law** to start an investigation on the rights of employees with a non-Christian religion. A student carried out the research and incorporated her experiences in the report: 'Feast of Sugar and Headscarfs'.

Two students found their way to the National Museum 'Van Speelklok tot Pierement' (a museum in Utrecht with a wealth of barrel organs and musical clocks). As students on work placement they assisted in setting up a summer exhibition in the museum. Some of their tasks were to produce ideas for the contents of the exhibition, for arrangements concerning loans of objects, and they were assisting wherever they could. Science Shop for Arts.

For the Science Shop for Biology a student carried out a research on the



effects on nature reserves of the use of worming drugs in cattle. It appears that a more careful use of these drugs is desirable. As a result of this research caretakers of nature reserves now talk about the use and necessity of worming.

FORUM, Institute for Multicultural Development, wondered what selfimage Moluccan youths have (The Molucca Islands used to be part of a Dutch



colony). Two students were working on this question. The Science Shop for Social Sciences mediated this project. The project resulted in the report 'We are the history of the Netherlands'. It can be concluded from the report that Moluccan youths attach great value to strong family ties, religious perception, and to speaking their own language, Malay.



The **Chemistry Science Shop** helped a group of inhabitants in Leerdam-West with their actions against air pollution and noise nuisance from the Leerdam Glassworks. The neighbours of the glassworks became experts in the field of procedures and technical matters. As a result, the group of inhabitants is now able to confer on these issues independently with Leerdam Glassworks.

'Remedies for eating disorders' is a report that was written on demand of the Foundation Anorexia and Bulimia. A student carried out a thorough literary published by the client. Other products of the research projects are: exhibitions, articles in scientific magazines, symposia, a brochure or information folder, or a course or course material.

# **Report in Science Shop Series**

'Kick the habit or swallow it. Methadon behind bars.' A student carried out a research concerning the methadon supply in penitentiaries in the Netherlands. Science Shop for Law.

#### **Article**

'Information on medicines for Refugees.' A student wrote an article on the way in which information about medicines is, or should be conveyed to refugees. Science Shop for Medicines.

#### **Exhibition**

The Association against Environmental Degradation (De Vereniging tegen Milieubederf) in Vlaardingen tried to stimulate schools in the region to pay more attention to environmental protection. The Science Shop for Biology developed an exhibition with information on successful projects about environmental protection on several schools.

#### Course

On the initiative of the Foundation Living Environment het Gooi, de Vechtstreek and surroundings (Vereniging Leefmilieu het Gooi, de Vechtstreek en omgeving) a course for local councilors was developed disclosing the basic concepts on ecology. A manual for teachers was also written. The course is now being used in several provinces. The provinces of Noord-Holland and Utrecht subsidised the project. Science Shop for Biology.

# **Symposium**

As a result of a research on the effects of divorce on pension schemes, the Christian National Trade Union (Christelijk Nationaal Vakverbond in Nederland) and the Science Shop for Law organized a symposium on this subject.

# **Book published by client**

'Cemeteries. Background archive research and editorial work for a project concentrating on the history of interment in Utrecht.' The book is published in the 'Utrechtse Monuments Series' (Stichtse Monumentenreeks) by order of the Terebinth Association (Vereniging de Terebinth). Science Shop for Arts.



# Information folder

For the organization *The Netherlands Non-toxic (Nederland Gifvrij)*, an information folder was composed. It contains a manual and thirty-two sheets with information on poisonous substances. The information con-

cerns health and environmental risks through soil pollution. The folder is subsidized by the Foundation for Public Education on Science and Technique (stichting PWT). Science Shop for Biology.

# Collaboration

The seven Science Shops of the University of Utrecht co-operate in an umbrella organization. The aim of the collaboration is to ensure the highest quality in the services of the joint Science Shops. A further aim is to contribute to strengthening the position of the Science Shops. The separate Science Shops are relatively autonomous within the collaboration. The co-ordinating office (Coördinatiepunt Utrechtse Wetenschapswinkels) is the supporting office of the collaboration.

Within the collaboration the Science Shops systematically work on the exchange of information and experience, on the execution of mutual activities and a common policy. Besides, several activities are co-ordinated. The Science Shops co-operate on several fields, of which research and publicity are the most important.

# Common publicity

The collaboration publishes its own quarterly, Magazijn (means 'Warehouse'). Magazijn is distributed free of charge and is intended for clients and potential clients in the first place. In addition to this, Magazijn is also oriented towards students, academic staff members, public relation officials, managers and journalists. By means of this quarterly the Science Shops inform their target groups about their objectives and methods of working. It also reveals the results of research carried out by the Science Shops.

# Collaboration in research

Initially much of the research performed by the Science Shops was monodisciplinary. Within the collaboration, more multidisciplinary oriented research projects are carried out. The idea behind this is that some requests for research necessitate a co-ordinated contribution from different disciplines to come to relevant, broad based research results. The joint Science Shops maintain a special fund to support these kind of joint research projects.

# **History of Science Shops**

In the course of the seventies, important developments took place within and outside the universities. The democratization of society also affected universities. Increasingly, movements came up which criticized the existing social order and institutions. Many students were attracted towards the universities because of the introduction of student grants. From the private sector there was a great call for highly qualified workers, as a result of which university education could not be restricted to the qualification of researchers. Science had to link up with practice and academic research and education had to be socially and economically relevant. Consequently, socialization of the university (and of science) was initiated.

Students and employees were more and more conscious about the importance of contributing to the solution of social problems. Students also became more and more critical and demanded an efficient education that would enable them to find a job after finishing their studies.

As a consequence of these social developments and other factors, the first Science Shops were founded at the Utrecht University. First the Chemistry Science Shop was founded (1974), then the Science Shop for Physics (1976), Biology (1978) and Arts (1981). In the eighties the number of Science Shops was increased substantially. Successively the Science Shop for Social Sciences (1985), Veterinary Medicine (1986), Law (1987), and Pharmacy (1988) were founded. In 1991 the Centre for Veterinary Medicine was disbanded.

In the course of 1981, the Science Shops submitted a request for the arrangement of a central bureau that could co-ordinate several Science Shop activities, in order to effect a better understanding. This resulted in the establishment of the co-ordinating office (het Coördinatiepunt Utrechtse Wetenschapswinkels) in 1985.

# Addresses, opening days and fields of activity per Science Shop

#### **General Web-site:**

http://www.uu.nl/onderdelen/wetenschapswinkels

# **Co-ordinating Office Utrecht Science Shops**

Bijlhouwerstraat 6, 3511 ZC Utrecht

phone: +31 30 - 253 61 50

E-mail: cp.wewis@pobox.accu.uu.nl Opening days: Monday-Wednesday.

Supporting office of the joint Science Shops

# **Science Shop for Arts**

Drift 8, 3512 BS Utrecht

phone: +31 30 - 253 61 71, fax: +31 30 - 253 91 31

E-mail: wetenschapswinkel@let.uu.nl Opening days: Monday-Thursday.

The Science Shop for Arts mediates requests for research in the fields of art, culture, history and language.

# Science Shop for Biology

Padualaan 8, K.Z401, 3584 CH Utrecht

phone: +31 30 - 253 73 63, fax: + 31 30 - 253 57 95

E-mail: wbu@bio.uu.nl

Opening days: Monday-Friday.

The Science Shop for Biology co-ordinates research projects in the fields of biology, particularly in connection with nature, environment, health and education.

#### **Chemistry Science Shop**

visitors: Padualaan 8, k. Z405 P.O.Box 880070, 4508 TB Utrecht

phone: +31 30 - 253 69 85. E-mail: cwu@chem.uu.nl

Opening days: Monday-Friday.

Voluntary organization connected with the faculty of Chemistry. The Science Shop is active on the chemical aspects of local environmental problems and the environment in houses and buildings.

#### **Science Shop for Law**

Janskerkhof 3, 3512 BK Utrecht

phone: +31 - 30 253 70 25, fax. +31 - 30 253 73 00

E-mail: wewir@law.uu.nl

Opening days: Monday-Friday.

The Science Shop for Law mediates in legal scientific requests for research. In this way the Science Shop stands out from first-line legal aid, like the law centres (citizens advice bureaus, like the 'Rechtswinkel' and the 'Wetswinkel') and the legal advice centre (Bureau voor Rechtshulp).

# **Science Shop for Medicines**

visitors: Sorbonnelaan 16, K.N811 P.O.Box 80082, 3508 TB Utrecht

phone: +31 30 - 253 73 09 E-mail: wewi@pharm.uu.nl Opening days: Monday-Friday.

The Science Shop for Medicines researches projects for patients' associations, consumers' organizations and organizations for developing cooperation.

### **Science Shop for Physics**

visitors: Leuvenlaan 4, K.129, 131 P.O.Box 80195, 3508 TD Utrecht

phone: +31 30 - 253 40 16, fax: +31 30 - 253 57 87

E-mail: wetenschapswinkel@phys.uu.nl Opening days: Monday, Wednesday, Friday.

The Science Shop for Physics depends on the knowledge of the physics departments and on the research experience of the centre itself, in the fields of sound, vibrations and domestic climate.

# **Science Shop for Social Sciences**

visitors: Heidelberglaan 1, H.105 P.O.Box 80140, 3503 RC Utrecht

phone: +31 - 30 253 46 33, fax: +31 30 - 253 49 01

E-mail: wewinkelsecr@fss.uu.nl Opening days: Monday-Friday.

The Science Shop for Social Sciences mediates requests for research, for example in the field of associations for the elderly and youth, multicultural organizations and aid organizations.